WITK

The Spark Gap

October 1980

Book VI Vol X

Official Journal of the Wellesley Amateur Radio Society

Hereabouts...

September was a very busy start to e new club year. The initial meeting of the year was September 4th and with the passing of the budget and the presentation of the 1980/81 club calendar (printed on the last page of this issue) got the year off to its official start. Only two days later, the club's second annual flea market (and the first of the fall season locally) was held at the Wellesley High School. Although not as big as hoped, it did give the club some financial support for the coming year.

The activities that day were not over when the flea market broke up in the early afternoon. A group went from the flea market to Maugus Hill in Wellesley and in a few hours erected the new repeater receive antenna which will allow a permanent location for the remote receive site.

The activities continued the weekend of September 13 and 14 with the ARRL September VHF QSO Party, conducted this year from Mt. Equinox in Vermont, one of the best VHF locations in New England. This successful effort is detailed on page 4.

The second meeting of the month was devoted to planning for the Boston 350 Parade when we could not get a guest speaker. The parade itself was held on Sunday, September 21, and kept a large group of hams busy for most of the day. Details on this in the next issue of the Spark Gap.

All of which leads us to our next subject....

Dues Dues Dues...

Yes, the beginning of the year also marks the time when your dues are due. The budget passed at the September 4th meeting once again sets the dues for 1980/81 at $8.00 per person, and $2.00 per additional family member. To continue to hold activities such as those mentioned above, we need the support of a large group of members so please get your dues in to the club treasurer Jim Hatherley, WA1TBY, 46 Hobson Street, Brighton, Massachusetts 02135, or give them to him in person at the club meetings. If you have any other ham friends who would be interested in the many activities of the Wellesley Amateur Radio Society, sign them up too! □

ACTIVITIES

Instead of a meeting on October 16, we are planning a tour of the communications at the Framingham Civil Defense headquarters. This facility is the statewide center for all C.D. communications and judging from the many towers and antennas visible outside must be well equipped. As our club is affiliated with the Wellesley C.D. this tour is most appropriate to acquaint members with C.D. communication abilities. Plan on meeting at the Framingham Civil Defense, Route 9 eastbound, Framingham, by 7:30 pm on October 16. For further information on the tour, contact Dick Paret, WA1ZLQ, at 762-5074. See you there. □

MEETINGS THIS MONTH:

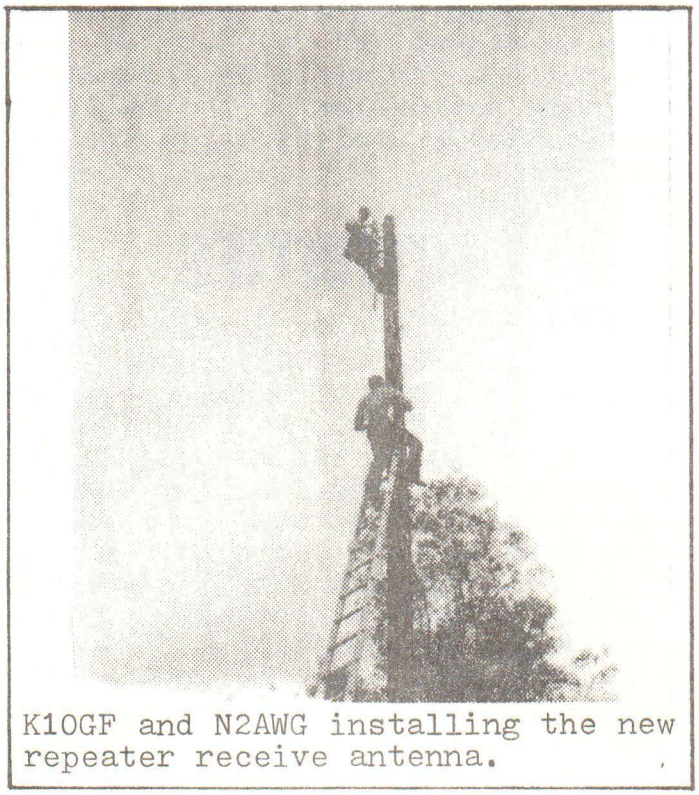
October 2, 1980 at 7:30 pm
October 18, 1980, 7:30 pm, tour
Intermediate Bldg., Wellesley Hills, Mass.

ANTENNA PARTY

by Nels Anderson, K1UR

On Saturday, September 6th right after the flea market, a crew went up to Maugus Hill to begin the installation of the new repeater receive site. As some of you may know, the repeater has been operated with split transmitter and receiver sites as an experiment for some time now, and the success of this experiment in increasing the range of the repeater resulted in the decision to make this set up permanent when a permanent receive site was found. Maugus Hill is one of the highest sites in town and with a pole and electricity available from the town, the site is just about perfect.

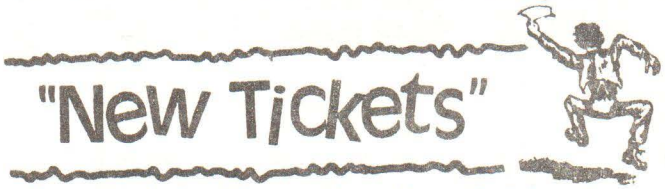
The new antenna is an Antenna Specialists fiberglass collinear, a commercial antenna which should provide many years of service. Several hours of work were necessary to mount this antenna on the pole. The difficulty of this operation is evident from the photograph (towers are definitely much easier to work on!).



K1OGF and N2AWG installing the new repeater receive antenna.

Just before sunset the installation was completed. The receiver and link transmitter will be moved to this site and may be in operation there by the time you read this.

With this site in operation and the new tower which should be going up at the transmitter site shortly, the repeater will be in its permanent state, at least as permanent as any Amateur station can be! Still being worked on is computer control for the repeater but this will still be some time in coming. Meanwhile, 63/03 should provide good coverage for its users. □



Congratulations to the following members of last year's Novice class who have passed the Novice exam and have received their calls: John J. Calnen, KA1FXS; Barry M. Glassman, KA1FXT; and James H. Lindholm, KA1FXU. Congratulations to all, and welcome to the world of Amateur Radio. Thanks to Erik Thoresen, K1OGF, for this information and for teaching this class.

Also, Dick Magnanti, who has recently returned to the area, is now sporting a new callsing having traded in WB1BUQ for AK1I. Dick upgraded to Extra some time ago, but only recently decided to get the new call. □

Flea Market

The 1980 Wellesley A.R.S. flea market was held under sunny skies on Saturday, September 6th. A good sized crew of helpers were present at the Wellesley High School site starting at around 7:30 am and continuing until about 1:00 pm.

Despite the perfect weather, we did not get the number of sellers that were hoped for and consequently the results were not as good as last year. The importance of getting advertising into the various ham magazines was evident from this.

Since expenses for the flea market were small it was a financial success although not quite as big a success as hoped for. Nevertheless, it will help pay for the various club activities this year. □

The Spark Gap

Official Journal of the Wellesley Amateur Radio Society

EDITOR-IN-CHIEF:

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32 WESTGATE ROAD, APT. 6
CHESTNUT HILL, MASS. 02167
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THE "SPARK GAP" IS A MONTHLY PUBLICATION OF THE WELLESLEY AMATEUR RADIO SOCIETY. ITS PRIMARY PURPOSE IS TO KEEP ITS MEMBERS ABREAST OF CURRENT HAPPENINGS, F.C.C. RULES & REGULATIONS CHANGES, AND TO LIST EQUIPMENT OFFERED FOR SALE OR TRADE BY MEMBERS. MEMBERS ARE ENCOURAGED TO CONTRIBUTE TO THE "SPARK GAP" AND MAY SENT THEIR ARTICLES (TYPEWRITTEN IF POSSIBLE) TO THE EDITOR-IN-CHIEF OR TO THE CLUB ADDRESS.

THE WELLESLEY AMATEUR RADIO SOCIETY IS A NON-PROFIT ORGANIZATION DEDICATED TO THE PROMOTION OF AMATEUR RADIO THROUGH INSTRUCTION, FELLOWSHIP, DEMONSTRATION, AND ENCOURAGEMENT OF PARTICIPATION. ANNUAL MEMBERSHIP IN THE SOCIETY IS $8. THE CLUB YEAR RUNS SEPTEMBER 1 TO AUGUST 31. AMATEUR NOVICE AND GENERAL CLASSES ARE CONDUCTED REGULARLY AT NO COST. TO ENROLL IN A CLASS, OR GAIN INFORMATION ABOUT THE SOCIETY IN GENERAL, WRITE:

THE WELLESLEY AMATEUR RADIO SOCIETY
324 WASHINGTON STREET
WELLESLEY HILLS, MASS. 02181

OFFICIAL BULLETIN

Nr 85, dated August 21, 1980:

Jan King, W3GEY, was awarded the coveted John C. Chambers Memorial Award at the Central States VHF Society's 14th Annual Conference last weekend in Colorado Springs, Colorado. Presentation was made by Carl Smith, WØBWJ, ARRL First Vice President. The award was for King's outstanding contribution to the OSCAR satellite program. Jan, the AMSAT Vice President of Engineering, accepted the award on behalf of all who worked with him on Amateur Radio satellite projects.

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Nr 89, dated September 3, 1980:

License fee refund, phase two, begins today. Licensees who paid fees of four to twenty dollars to the Federal Communications Commission between August 1, 1970 and February 28, 1975, may apply for partial refunds of those fees. Instructions and applications may be obtained from FCC offices or by sending a long self addressed envelope to FCC Refund, Special Requests, ARRL, Newington, Conn. 06111. □

Minutes

Meeting of August 21, 1980:

The meeting was opened at 7:44 pm by President David Curry, K1TK.

The secretary and treasurer's reports were read.

The calendar for the 1980/81 club year was discussed (tentative calendar is printed at the end of this issue).

Initial planning for the flea market on September 6th was begun.

The 1980/81 club budget was discussed and revised.

The meeting was closed at 9:47 pm.

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Meeting of September 4, 1980:

The first regular meeting of the 1980/81 club year was opened at 7:44 pm by President David Curry, K1TK.

The twenty members present each introduced themselves to the club.

The secretary's and treasurer's reports were read.

The budget for 1980/81 was presented in its final form. After discussion it was voted on and passed. The budget sets dues for the year at $8.00.

Final planning for the flea market and sign up of helpers was conducted.

Jim Hatherley, WA1TBY, discussed the Boston 350 parade and signed up people to help out.

The 1980/81 calendar of events was discussed and updated.

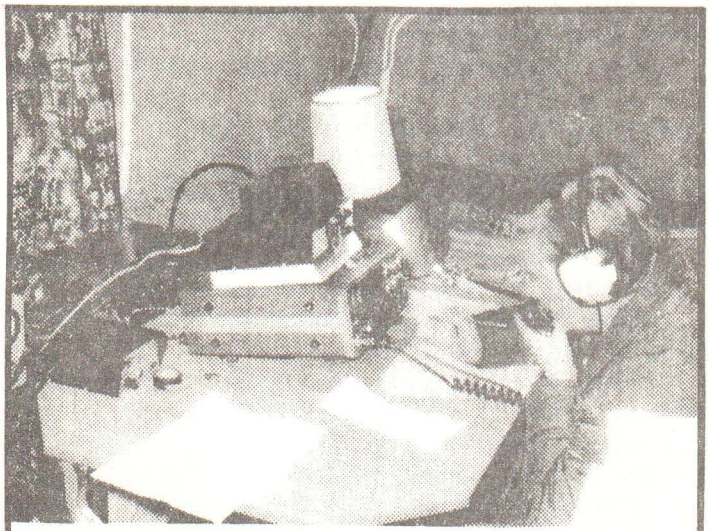
The status of the repeater was discussed. The new antenna for the receive site has been received and will be put up September 7. Tower for the transmit site has also been received and we are still waiting for the hospital to decide when they want to put it up. □

VHF Contest

by Nels Anderson, K1UR

On the weekend of September 13th and 14th we once again set out for Vermont and 3848 foot high Mt. Equinox for the September VHF QSO Party. Although we have operated from this site before, in the June 1978 and June 1979 contests this was our first effort from any site in the September contest. The rules for both the September and June contests are the same, so results are directly comparable.

The contest actually started many hours before the QSO's began, as an approximately five hour trip is required to get to Mt. Equinox. Thus we began around 7:00 am to get the final packing done and to set off. Set up on the mountain began in the early afternoon, but because of the amount of set up required, operation did not start until 5:00 pm, two hours after the official starting time. This was not a serious problem, however, as seven

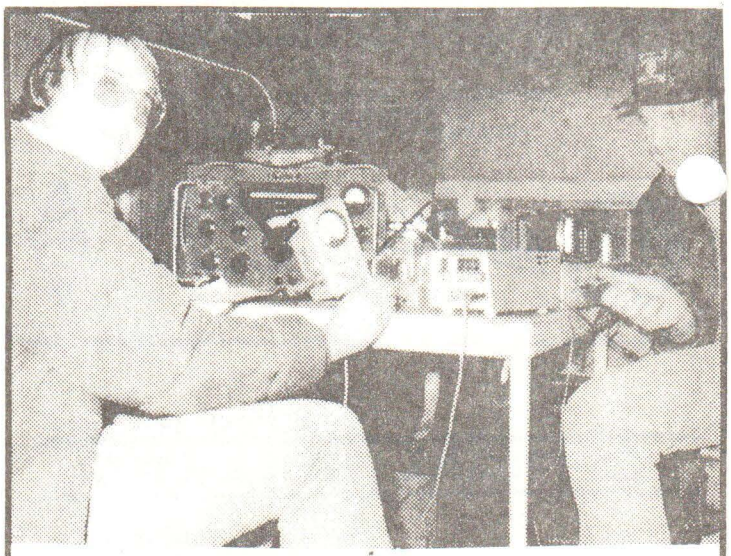


WA1PQY operating on two meters.

hours of off the air time are required during the contest period.

Once on the air, conditions proved to be good on all bands other than six meters. Two meters produced around the same number of contacts as it did during the June contest, but they were more spread out; many contacts into New York and New Jersey were recorded. Two contacts were even made with stations in West Virginia! The higher bands also proved to be more open than they were during the June contest. Operating 220 MHz only on FM direct, contacts as far as Pennsylvania were recorded and on 432 MHz cw one of the longest QSO's of the weekend was recorded with a contact in Virginia. These 220 and 432 MHz contacts were made with low power too, only 25 watts out on 220 and 8 watts out on 432.

Six meters never did open up during the contest. If it weren't for two new sections recorded during the closing minutes of the contest six meters would have produced only as many sections as two meters. Even though conditions were down, a more persistant operation of the band resulted in more contacts than during the June contest.



K1TK and K1OGF at the 432 station

Once again, weather conditions on the mountain played an important part in the operations. The mountain top became fogged in shortly after our arrival and did not clear for the remainder of the weekend; in fact, the weather got worse. The fog was similar to the conditions we experienced in our last trip to Mt. Equinox, but this time we also had a number of rain showers and a thunder storm on Sunday evening. The rain and wind resulted in the six meter tent blowing over Saturday night when we were off the air, fortunately resulting in no damage to the equipment. When we got

got up Monday morning to take everything down, we found the two meter tower already leaning at a 25 degree angle.

Overall, our score improved over each previous effort as had been hoped. Band by band breakdown is as follows:

Band	QSOs	Pts each	Pts.	Mult.
50	213	1	213	21
144	321	1	321	19
220	22	2	44	10
432	38	2	76	14
1296	4	3	12	4
2304	1	3	3	1
TOTAL	599		669	69

After taking down the equipment on a soggy Monday morning, the contest crew consisting of K1TK, K1UR, K1OGF, WA1PQY, W1OOP, WB1BUM, N2AWG, and WA2ORV headed back home. The last bit of "fun" was not yet over, as even before getting out of Vermont, David Kent, N2AWG, lost the hitch off his truck and had to bring the generator trailer to a rather rough stop. Fortunately, a nearby gas station was able to weld the hitch back together and only about an hour was lost. Now on to the January contest... □

hr REPORT

10.1 MHz operation by two Canadian Amateurs has been approved by the Department of Communications. The DoC has agreed to issue VE3OB and VE3DPB VE9 licenses in the experimental services and to permit them to operate using very narrow band, low bit rate digital communications anywhere in the 10.1 to 10.5 MHz future Amateur band. Regular Amateur use of 30 meters is not scheduled to begin until January 1, 1980. Thanks VE3QB.

hr Report, September 11, 1980

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A kidnapping was thwarted in Hialeah, Florida, last weekend due at lease in part ot quick work by observant Amateurs. The incident began when a car carrying two men and a woman bumped into another car with a woman and her 16-month-old baby. When the woman got out of her car to examine the damage, one of the men jumped into her car and sped off with the child while the remaining couple also left in their car.

An Amateur who observed the incident put it on the SIRA repeater, WB4ESB/R, and other local machines immediately, while the authorities were also alerted. A few hours later the trio were caught and the baby recovered unhurt. The quick solution of the crime was credited in part to the Amateur participation.

hr Report, September 5, 1980

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The first satellite WAC has been claimed by WØCA. QSL cards were submitted to ARRL Headquarters and were being checked at press time. Worked All Continents via a Phase II satellite was considered impossible until WØCA's cards showed up at League headquarters. Congratulations!

hr Report, August 29, 1980□

OFFICERS

PRESIDENT:
David Curry, K1TK, 237-2450
VICE PRESIDENT:
Erik J. Thoresen, K1OGF, 653-1216
CORRESPONDING SECRETARY:
Bill Hanlon, N1ADY, 384-8056
RECORDING SECRETARY:
Nels Anderson, K1UR, 323-5029
TREASURER:
Jim Hatherley, WA1TBY, 254-6042
OPERATING ACTIVITIES:
Glenn Brodie, N1ACN, 443-8677
FUND RAISING:
Kevin Kelly, WA1YHV, 242-0341
EDUCATION CHAIRMAN:
Bill Downing, WA1PQY, 655-3040
EMERGENCY COORDINATOR:
David Curry, K1TK, 237-2450
TECHNICAL COMMITTEE:
Mort Cohan, KA1IU, 359-7979
ELECTION COMMITTEE:
C.J. McDonald, WB1BUM, 332-6091
STATION MANAGER:
Erik J. Thoresen, K1OGF, 653-1216
TRUSTEE:
Lud Fasolino, K1LF, 237-0316
REPEATER COMMITTEE:
David Curry, K1TK, 237-2450
Bill Downing, WA1PQY, 655-3040
Scott Nacey, WA1YOJ, 235-1599
Dick Paret, WA1ZLQ, 762-5074

"timeout!"

By Mike Adlerstein, K1FB

Is it who you know that is important in the world of DX? I've observed that it may not be everything, but it sure helps to have connections. And, if your connections don't like you, it can actually hurt.

Everyone knows that for most DXpeditions, getting on the list by prearrangement simplifies making the contact. If your call is familiar, somehow you are more easily heard in the pile-up. Many a pile-up has been stopped dead as a rag chew ensues.

Then there is always the word of advice on where and when to listen. Getting a QSL card can also be simplified by knowing the right people. Recently, a local operator had been waiting for years for two Russian cards--nothing. Then an off hand remark to an internationally known DX'er friend brought the miracle--both cards via the bureau. A coincidence? Maybe. But what of the two local operators who had worked the Aves Island expedition in April 1979 and had not received the cards one year later. Again some good advice from those who know, and a personal note to a ham in Venezuela and, bingo! the card arrives.

Who you know is a double edge sword. If you have a bad reputation for on the air etiquette, etc., etc., your contact might never be made, or confirmed. All's fair in love, war, and DX. □

The Way It Goes

by Julian Jablin, W9IWI

(From 220 Notes)

Solid state gear may have its virtues, but the old fashioned tube equipment had advantages that a handful of ICs on a printed circuit board can't match.

When a transistorized piece of equipment does not work, it just does not work. No clues. No way to start finding out what's wrong. No helpful hints out of the gear itself.

Now an ancient radio with a bunch of 6AG7s, a lot of condensers (that's right, condensers) and resistors und the chassis and a power transformer off in the corner was a gold mine of information when it stopped going. Did the tubes get warm, to begin with. If one or more were cold, there you were right away--yank it out, check the filament. And all those resistors; nothing was as handy as a resistor burned black to point to the trouble. Replace the resistor! If the new one burned up too, look a little further.

And if you had to get really scientific, a VTVM that could tell the difference between 25 volts and 250 volts was about all you needed.

Back in the very early days, I learned a lot from one of the first receivers I built, a regen detector (look that up, you young guys) preceded by an RF stage with an audio amplifier after it. Now a regenerative detector has to oscillate before it can detect--that's basic. There were a lot of ways to get my detector to go into oscillation, but the surest was to pick up one corner of the rig and dr it gently on the table. Signals!

Over the years, I (and thousands of other old timers) learned that one of the best forms of therapy for ailing gear was a gentle (or not-so-gentle) thump on the box. In the Army I stole a rubber mallet from the motor-pool sergeant just to keep a BC-375 in operation.

Solid state gear does not respond to this kind of treatment. I suspect this is because engineers (the type with hairy ears) design transistors, ICs, and other components to withstand shock. How helpful do they think that is?

I built a little speech compressor, etched the board, stuck in all of the parts just like the diagram said, plugged in the necessary cables, and... nothing. No compression. In fact, no speech. And there the thing sat, just looking up at me. I banged it a little just to settle things in place. Still no action. To be sure that I was on the right track, I banged it a little harder, with no more success. Finally I threw it across the shack. Nothing broke, came loose or shorted out. Nothing worked either.

And when it came time to investigate the trouble the way the book said I was faced with measuring .6 mil, 3.8 volts and no power at all. With what?

They can send all the transistors back to Japan--or Texas. For my part, I'm in the market for a few 12AT7's and sockets to go with them, plus a spool of #24 stranded hook-up wire. □

'YL' Rumblings

HAM FESTATION

by Shirley Henry, wife of Don W3FE

For many years now, my husband has wanted me to get my ham ticket. I have even gone so far as learning the code. Hi! The problem is that my interpretation of the wireless is somewhat different than what Guglielmo Marconi had in mind. I thought that Ohm's Law was just an amendment to Murphy's Law and that feedline was a group of people waiting for lunch. I once asked what kind of fertilizer was used on an antenna farm. And when my husband said, "We are going to have a hamfest"....I expected a pig roast.

The Sweepstakes somewhat parallels the start of the Le Mans. It appears to be an endurance test of how little sleep one needs, how quickly meals can be eaten and how much coffee can be put away without relief.

Over the years I have just ignored all parts of Ham Radio. I had hopes that it would go away but I'm afraid that within a few years my son will get the bug.

My mother-in-law, who put up with a ham for a long time, has given me these words: "At least you know what he is doing." Great! I know what he is doing but why does he want me to do it too?

I do have some interests but he would never consider sharing with me. For example: horseback riding. Don would never get even close to a horse because the stable smells. Well....a little bit of shoveling would alleviate the odor....and after all he's been shoveling fertilizer on two meters for some time now so he should be used to it.

Oh, well!...it's fun to agitate him and as the old saying goes, "Different strokes for different folks!" □

--from "The Sine of the Times", Indiana County ARC via ARNS

hr REPORT

A traffic ferryboat sinking near Isla Aquada off the Yucatan Pennisula claimed the life of XE3R and about 40 others August 23, but Mexican authorities credit a quick-thinking Amateur with averting an even higher toll in the disaster. Screams in the dark of a rainy evening brought XE3CA to the water's edge, where he spotted the ferry sinking about a half mile offshore. He jumped into XE3R's nearby parked car and via 2 meters alerted club station XE3RA, whose operator notified authorities. The death toll would have been even worse if it hadn't been for the quick call from XE3CA and the aid of other Amateurs who heard his call and rushed to help in rescue work. Thanks W5XW.

hr Report, September 5, 1980

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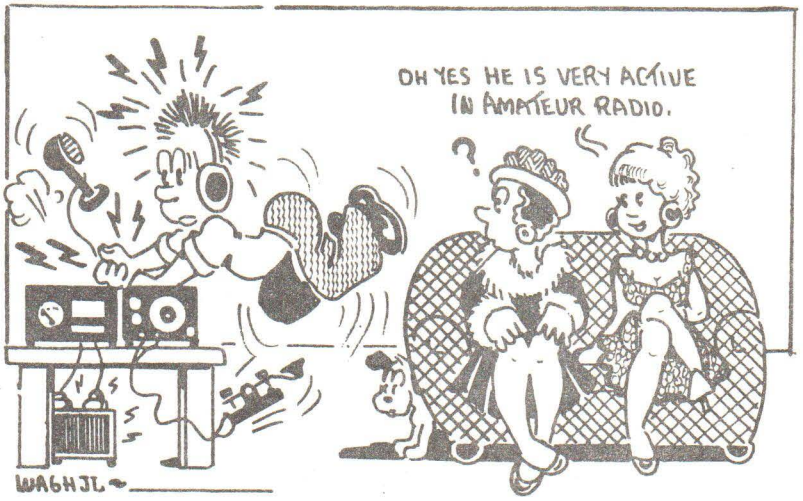
377,615 individual Amateurs were licensed in the United States at the end of July, continuing the increase noted every month this year. Station licenses at the end of July totaled 388,115.

hr Report, September 11, 1980□

CHUCKLE KORNER



OLDE TIME RADIO

by Jim Idelson, K1IR

Part Five

During the early days of radio broadcasting there were occasional problems due to the misunderstanding of the media. Some of the resulting incidents still make good stories.

Talent, which was available at very little or no cost, was not the most reliable form of entertainment. It was not always possible to have a manuscript of a speech in hand well in advance; in fact an orator would often face the microphone with a bare minimum of notes to which he could refer. Sometimes, a crank or propagandist would make his way to the microphone, and subsequently proceed to horrify the operators with some sort of impassioned speech. A technician would cut off the microphone as soon as possible, leaving the astonished listeners in oblivion. The solution was a second emergency microphone and phonograph in another, smaller studio which would be activated with the throw of a switch. A selection would be announced and all would return to normal.

Of small dimensions, the WJZ studio became unbearably warm in the summer days of 1922, so much that its window, facing on a fire escape was kept open.

It was a particularly warm evening. A soprano was doing her utmost before the microphone. Suddenly, without warning, there was the most uncanny howling and screeching and spitting. We turned hurriedly to the window, where two fat tom cats were competing with science and art. An instant later the cats dashed into the studio and completed their duet before the microphone. They stole the show. The soprano's efforts were momentarily upset. Pandemonium reigned. And finally the calm "ACN", in a business-like manner, announced the next piece without word of explanation.

Sixteen phone calls were received within the next fifteen minutes. Five hundred letters flowed in during the next day or two. Newspapers pestered for information regarding the unearthly noises that had emanated from WJZ. All of which was explained at length to the interested public, and two tom cats scored a permanent place in broadcasting history.

Another mishap is related in <u>This Thing Called Broadcasting</u>. Madame Johanna Gadski, a famous opera singer, was making her radio debut at WJZ. An audience was present including some Westinghouse officials. All, including the announcers and operators were in formal attire. As the performance got under way it became evident that Madame Gadski was under the impression that the louder she sang, the more people would hear her over the radio. It was obvious that her voice (she had a reputation for an extremely strong voice anyways) was causing damage to the radio equipment on the roof above. The "ACN" was rushing back and forth between the floor and his crystal set monitor, adjusting the microphone position each time he came out. Finally there was nothing more he could do--he had placed the microphone at the furthest possible extremity from the performer. One can imagine the technician operating the transmitter, who must have been furious, scurrying about trying to keep fuses and circuit breakers from blowing out.

The fire in the WJZ studio in the fall of 1921 is remembered by Charles Popenoe, then station manager. At ten o'clock one evening a photographer was in to take some pictures. Flash was necessary. At the time flashlight powder was held in a tray by an assistant and ignited to illuminate the scene. Well, that night, not only the flashlight powder was ignited. The soundproofing drapes on the ceiling were the first to go, then the sides. When the flames were quenched, the furniture and the piano were destroyed as well. Luckily, through the generosity of the Aeolian Company of New York City, a Weber-Duo-Art grand piano was lent to the studio and they were back on the air in short order.

(Radio's increasing popularity and commercialism are examined next month.) □

WELLESLEY AMATEUR RADIO SOCIETY
1980/81 CALENDAR

September 4: Business meeting (flea market, budget, calendar)
September 6: Flea market, Wellesley High School
September 13-14: VHF QSO Party, Mt. Equinox, Vermont
September 18: Meeting--Boston 350 parade planning
September 21: Boston 350 Parade

October 2: Business meeting (Natick Mall, S.E.T., QSO Party)
October 4-5: New England ARRL Convention, Boxborough, Massachusetts
October 14: Novice class starts
October 16: No meeting--tour of Framingham C.D. communications
October 18: S.E.T.
October 19: Wellesley Veterans Parade

November 6: Business meeting (Natick Mall, QSO Party, banquet)
November 20: Meeting--guest speaker to be announced

December 8-14: Natick Mall Message Fair
December ??: Banquet

January 8: Business meeting (Field Day, VHF contest, Marathon, auction)
January 10-11: VHF Sweepstakes
January 22: Meeting--guest speaker to be announced

February 5: Business meeting (Field Day, Marathon, auction)
February 19: Meeting--Erik Thoresen, K1OGF, guest speaker

March 5: Business meeting (Field Day, Marathon, auction, nomination of officers
March 19: Meeting--guest speaker to be announced

April 2: Business meeting (Field Day, Marathon, auction)
April 4: Auction (tentative)
April 16: Meeting: film and marathon final planning
April 20: BAA Marathon (tentative)

May 7: Business meeting (Field Day, VHF QSO Party)
May 21: Meeting--guest speaker to be announced and elections

June 4: Business meeting (Field Day, VHF QSO Party)
June 18: Pizza party and final Field Day planning

July 16: Summer meeting

August 20: Summer meeting

The Spark Gap

WELLESLEY
AMATEUR RADIO
SOCIETY

324 Washington Street
Wellesley Hills, Massachusetts 02181

MEMBER

ARNS

Amateur Radio News Service

FIRST CLASS MAIL